

Amendments To The Claims

Please amend the claims as follows:

1. (currently amended) A ~~system for forming~~ method of making a microporous ink receptive coating comprising:

a fusible latex ~~configured to coat~~ for coating a substrate, wherein said fusible latex includes a hard core material and a soft shell material;

wherein said latex exhibits self-adhesive properties at a system operation temperature.

2. (currently amended) The ~~system~~ method of claim 1, wherein said latex is ~~configured to form~~ for forming an ink permeable microporous layer when coated on said substrate.

3. (currently amended) The ~~system~~ method of claim 2, wherein said latex is ~~configured to be fused into~~ for forming a continuous transparent film by the application of thermal energy or pressure.

4. (currently amended) The ~~system~~ method of claim 3, wherein said hard core material exhibits a glass transition temperature above 80 degrees Celsius and said soft shell material exhibits a glass transition temperature below 70 degrees Celsius.

5. (currently amended) The ~~system~~ method of claim 4, wherein said hard core material comprises one of poly(methylmethacrylate), poly(styrene), poly(tert-butylstyrene), poly(p-methylstyrene), poly(t-butylacrylamide), poly(styrene-co-methylmethacrylate), poly(styrene-co-t-butylacrylamide), poly(methylmethacrylate-co-t-butylacrylamide), or homopolymers derived from tert-butyl methacrylate, p-cyanophenyl methacrylate, pentachlorophenyl acrylate, methacrylonitrile, isobornyl methacrylate, phenyl methacrylate, acrylonitrile, isobornyl acrylate, p-

cyanophenyl acrylate, 2-chloroethyl acrylate, 2-chloroethyl methacrylate, 2-naphthyl acrylate, n-isopropyl acrylamide, 1-fluoromethyl methacrylate, isopropyl methacrylate, or 2-hydroxypropyl methacrylate.

6. (currently amended) The ~~system~~ method of claim 4, wherein said soft shell material comprises one of a homo- or copolymer derived from n-butyl acrylate, n-ethylacrylate, 2-ethylhexylacrylate, methoxyethylacrylate, methoxyethoxy-ethylacrylate, ethoxyethylacrylate, ethoxyethoxyethylacrylate, 2-ethylhexylmethacrylate, n-propylacrylate, hydroxyethylacrylate, tetrahydrofurfuryl acrylate, cyclohexylacrylate, iso-decylacrylate, n-decylmethacrylate, n-propylacrylate, vinylacetate, 2-(N,N-Dimethylamino)ethyl methacrylate, 2-N-Morpholinoethyl acrylate, or 3-Dimethylaminoneopentyl acrylate.

7. (currently amended) The ~~system~~ method of claim 4, wherein said soft shell material comprises a cationic monomer or a salt of a cationic monomer.

8. (currently amended) The ~~system~~ method of claim 7, wherein said soft shell material comprises one of poly(n-butyl acrylate co-trimethylammoniummethyl acrylate), poly(2-ethylhexyl acrylate co-trimethylammoniummethyl acrylate) poly(methoxyethylacrylate co-trimethylammoniummethyl acrylate), poly(ethoxy-ethylacrylate co-trimethylammoniummethyl acrylate), poly(n-butylacrylate-co-trimethylammoniummethyl acrylate), poly(n-butylacrylate-co-trimethylammoniummethyl methacrylate), poly(n-butylacrylate-co-vinylbenzyltrimethylammonium chloride), poly (n-ethylhexylacrylate-co-2-hydroxyethylacrylate co-trimethylammoniummethyl acrylate), poly (n-butylacrylate-co-2-hydroxyethylacrylate co-trimethylammoniummethyl acrylate), poly(n-ethylhexylacrylate -co- vinylbenzyltrimethylammonium chloride), poly(n-methoxyethylacrylate -co-

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vinylbenzyltrimethylammonium chloride), or poly(n-ethoxyethylacrylate-co-vinylbenzyltrimethylammonium chloride).

9. (currently amended) The ~~system~~ method of claim 4, wherein said latex further comprises a coalescing agent.

10. (currently amended) The ~~system~~ method of claim 9, wherein said coalescing agent comprises one of ethylene glycol, propylene glycol, hexylene glycol, ester of ethylene glycol, propylene glycol, hexylene glycol, 2-butoxyethanol, 2,2,4-trimethylpentane diol monoisobutyrate, diisobutyl esters of a mixture of diacids, Rhodiasolve DIB (by Rhodia Chemical), butyl cellulose, 2-(2-butoxyethoxy)ethanol, 2-butoxyethanol, TEXANOL (Eastman Chemical), diisobutyl succinate, diisobutyl glutarate, diisobutyl adipate, SER-AD FX-510 (Sasol Chemical), or SER-AD FX-511 (Sasol Chemical).

Claims 11-25 (canceled)

26. (currently amended) A method for forming a medium having a microporous ink receptive coating, the method comprising: depositing a fusible latex on a substrate, wherein said fusible latex includes a hard core material and a soft shell material;

wherein said latex exhibits self-adhesive properties at a system operation temperature.

27. (original) The method of claim 26, wherein said fusible latex is deposited on said substrate having a density of 0.1 to 10 grams per square meter.

28. (original) The method of claim 27, wherein said latex is configured to be fused into a continuous transparent film by the application of thermal energy or pressure.

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29. (original) The method of claim 28, wherein said hard core material exhibits a glass transition temperature above 80 degrees Celsius and said soft shell material exhibits a glass transition temperature below 70 degrees Celsius.

30. (original) The method of claim 29, wherein said hard core material comprises one of poly(methylmethacrylate), poly(styrene), poly(p-methylstyrene), poly(t-butylacrylamide), poly(styrene-co-methylmethacrylate), poly(styrene-co-t-butylacrylamide), poly(methylmethacrylate-co-t-butylacrylamide), or homopolymers derived from p-cyanophenyl methacrylate, pentachlorophenyl acrylate, methacrylonitrile, isobornyl methacrylate, phenyl methacrylate, acrylonitrile, isobornyl acrylate, p-cyanophenyl acrylate, 2-chloroethyl acrylate, 2-chloroethyl methacrylate, 2-naphthyl acrylate, n-isopropyl acrylamide, 1-fluoromethyl methacrylate, isopropyl methacrylate, or 2-hydroxypropyl methacrylate.

31. (original) The method of claim 29, wherein said soft shell material comprises one of a homo- or copolymer derived from n-butyl acrylate, n-ethylacrylate, 2-ethylhexylacrylate, methoxyethylacrylate, methoxyethoxy-ethylacrylate, ethoxyethylacrylate, ethoxyethoxyethylacrylate, 2-ethylhexyl-methacrylate, n-propylacrylate, hydroxyethylacrylate, tetrahydrofurfuryl acrylate, cyclohexylacrylate, isodecylacrylate, n-decylmethacrylate, n-propylacrylate, vinylacetate, 2-(N,N-Dimethylamino)ethyl methacrylate, 2-N-Morpholinoethyl acrylate, or 3-Dimethylaminoneopentyl acrylate.

32. (original) The method of claim 29, wherein said soft shell material comprises a cationic monomer or a salt of a cationic monomer.

33. (original) The method of claim 32, wherein said soft shell material comprises one of poly(n-butyl acrylate co-trimethylammoniummethyl acrylate), poly(2-ethylhexyl acrylate co-trimethylammoniummethyl acrylate) poly(methoxyethylacrylate co-trimethylammoniummethyl acrylate), poly(ethoxy-ethylacrylate co-trimethylammoniummethyl acrylate), poly(n-butylacrylate-co-trimethylammoniummethyl acrylate), poly(n-butylacrylate-co-trimethylammoniummethyl methacrylate), poly(n-butylacrylate-co-vinylbenzyltrimethylammonium chloride), poly (n-ethylhexylacrylate-co-2-hydroxyethylacrylate co-trimethylammoniummethyl acrylate), poly (n-butylacrylate-co-2-hydroxyethylacrylate co-trimethylammoniummethyl acrylate), poly(n-ethylhexylacrylate -co- vinylbenzyltrimethylammonium chloride), poly(n-methoxyethylacrylate -co- vinylbenzyltrimethylammonium chloride), or poly(n-ethoxyethylacrylate -co-vinylbenzyltrimethylammonium chloride).

34. (original) The method of claim 29, wherein said latex further comprises a coalescing agent.

35. (original) The method of claim 34, wherein said coalescing agent comprises one of ethylene glycol, propylene glycol, hexylene glycol, ester of ethylene glycol, propylene glycol, hexylene glycol, 2-butoxyethanol, 2,2,4-trimethylpentane diol monoisobutyrate, diisobutyl esters of a mixture of diacids, Rhodiasolve DIB (by Rhodia Chemical), butyl cellulose, 2-(2-butoxyethoxy)ethanol, 2-butoxyethanol, TEXANOL (Eastman Chemical), diisobutyl succinate, diisobutyl glutarate, diisobutyl adipate, SER-AD FX-510 (Sasol Chemical), or SER-AD FX-511 (Sasol Chemical)

36. (currently amended) ~~The method of claim 27, further A~~
method of printing on a medium having a microporous ink receptive
coating comprising fusible latex, the method comprising:

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selectively jetting an ink onto said fusible latex, ~~thereby forming a desired image~~; and
fusing a top portion of said fusible latex.

37. (original) The method of claim 36, wherein said ink is jetted into said fusible latex by one of a thermally actuated inkjet dispenser, a mechanically actuated inkjet dispenser, an electrostatically actuated inkjet dispenser, a magnetically actuated dispenser, a piezoelectrically actuated dispenser, or a continuous inkjet dispenser.

38. (original) The method of claim 36, wherein said fusing comprises applying sufficient thermal energy to heat said latex above a glass transition temperature of said soft shell material.

39. (original) The method of claim 38, wherein said thermal energy is provided by a thermal roller.

40. (original) The method of claim 39, wherein said thermal roller is further configured to provide pressure to said latex.

41. (original) The method of claim 36, further comprising automating said method.

42. (currently amended) A means for forming a microporous ink receptive coating comprising:

a binderless means for forming said coating ~~a substrate~~, wherein said binderless means includes a hard core material and a soft shell material;

wherein said binderless means exhibits self-adhesive properties at a system operation temperature.

43. (currently amended) The means for forming a microporous
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ink receptive coating of claim 42, wherein said binderless means ~~forms~~
is for forming an ink permeable microporous layer ~~when coated on said~~
substrate.

44. (currently amended) The means for forming a
microporous ink receptive coating of claim 42, wherein said binderless
means is configured ~~to be~~ for forming a fused, into a continuous
transparent film by the application of thermal energy or pressure.

45. (original) The means for forming a microporous ink receptive
coating of claim 42, wherein said hard core material exhibits a glass
transition temperature above 80 degrees Celsius and said soft shell
material exhibits a glass transition temperature below 70 degrees
Celsius.

Claims 46-47 (canceled)

48. (original) A microporous coating comprising:
a fusible latex, wherein said fusible latex includes a hard core
material and a soft shell material;
wherein said latex exhibits self-adhesive properties at a room
temperature.

49. (currently amended) The microporous coating of claim 48,
wherein said latex is ~~configured to form~~ for forming an ink permeable
microporous layer ~~when coated on a substrate~~.

Claim 50 (canceled)

51. (original) The microporous coating of claim ~~50~~ 49, wherein
said latex is ~~configured to be~~ for forming a fused, into a continuous
transparent film by the application of thermal energy or pressure.

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52. (original) The microporous coating of claim 51, wherein said hard core material exhibits a glass transition temperature above 80 degrees Celsius and said soft shell material exhibits a glass transition temperature below 70 degrees Celsius.

53. (original) The microporous coating of claim 52, wherein said hard core material comprises one of poly(methylmethacrylate), poly(styrene), poly(p-methylstyrene), poly(t-butylacrylamide), poly(styrene-co-methylmethacrylate), poly(styrene-co-t-butylacrylamide), poly(methylmethacrylate-co-t-butylacrylamide), or homopolymers derived from p-cyanophenyl methacrylate, pentachlorophenyl acrylate, methacrylonitrile, isobornyl methacrylate, phenyl methacrylate, acrylonitrile, isobornyl acrylate, p-cyanophenyl acrylate, 2-chloroethyl acrylate, 2-chloroethyl methacrylate, 2-naphthyl acrylate, n-isopropyl acrylamide, 1-fluoromethyl methacrylate, isopropyl methacrylate, or 2-hydroxypropyl methacrylate.

54. (original) The microporous coating of claim 52, wherein said soft shell material comprises one of a homo- or copolymer derived from n-butyl acrylate, n-ethylacrylate, 2-ethylhexylacrylate, methoxyethylacrylate, methoxyethoxy-ethylacrylate, ethoxyethylacrylate, ethoxyethoxyethylacrylate, 2-ethylhexyl-methacrylate, n-propylacrylate, hydroxyethylacrylate, tetrahydrofurfuryl acrylate, cyclohexylacrylate, iso-decylacrylate, n-decylmethacrylate, n-propylacrylate, vinylacetate, 2-(N,N-Dimethylamino)ethyl methacrylate, 2-N-Morpholinoethyl acrylate, or 3-Dimethylaminoneopentyl acrylate.

55. (original) The microporous coating of claim 52, wherein said soft shell material comprises a cationic monomer or a salt of a cationic monomer.

56. (original) The microporous coating of claim 55, wherein said soft shell material comprises one of poly(n-butyl acrylate co-trimethylammoniummethyl acrylate), poly(2-ethylhexyl acrylate co-trimethylammoniummethyl acrylate) poly(methoxyethylacrylate co-trimethylammoniummethyl acrylate), poly(ethoxy-ethylacrylate co-trimethylammoniummethyl acrylate), poly(n-butylacrylate-co-trimethylammoniummethyl acrylate), poly(n-butylacrylate-co-trimethylammoniummethyl methacrylate), poly(n-butylacrylate-co-vinylbenzyltrimethylammonium chloride), poly (n-ethylhexylacrylate-co-2-hydroxyethylacrylate co-trimethylammoniummethyl acrylate), poly (n-butylacrylate-co-2-hydroxyethylacrylate co-trimethylammoniummethyl acrylate), poly(n-ethylhexylacrylate -co- vinylbenzyltrimethylammonium chloride), poly(n-methoxyethylacrylate -co- vinylbenzyltrimethylammonium chloride), or poly(n-ethoxyethylacrylate -co-vinylbenzyltrimethylammonium chloride).

57. (original) The microporous coating of claim 49, wherein said latex further comprises a coalescing agent.

58. (original) The microporous coating of claim 57, wherein said coalescing agent comprises one of ethylene glycol, propylene glycol, hexylene glycol, ester of ethylene glycol, propylene glycol, hexylene glycol, 2-butoxyethanol, 2,2,4-trimethylpentane diol monoisobutyrate, diisobutyl esters of a mixture of diacids, Rhodiasolve DIB (by Rhodia Chemical), butyl cellulose, 2-(2-butoxyethoxy)ethanol, 2-butoxyethanol, TEXANOL (Eastman Chemical), diisobutyl succinate, diisobutyl glutarate, diisobutyl adipate, SER-AD FX-510 (Sasol Chemical), or SER-AD FX-511 (Sasol Chemical).

59. (original) A sealable ink receptive substrate comprising:
an ink receiving layer; and

a microporous coating deposited on said ink receiving layer;

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wherein said microporous substrate comprises a fusible latex, said fusible latex including a hard core material and a soft shell material, and exhibiting self-adhesive properties at a room temperature.

60. (original) The sealable ink receptive substrate of claim 59, wherein said ink receiving layer comprises:

a base including a paper or photobase material; and
a microporous substrate disposed on said base.

61. (original) The sealable ink receptive substrate of claim 59, wherein said ink receiving layer comprises a previously deposited layer of microporous latex.

62. (original) The sealable ink receptive substrate of claim 59, wherein said fusible latex is configured to form an ink permeable microporous layer when coated on said substrate.

63. (original) The sealable ink receptive substrate of claim 62, wherein said fusible latex is configured to be fused into a continuous transparent film by the application of thermal energy or pressure.

64. (original) The sealable ink receptive substrate of claim 63, wherein said hard core material exhibits a glass transition temperature above 80 degrees Celsius and said soft shell material exhibits a glass transition temperature below 70 degrees Celsius.

65. (original) The sealable ink receptive substrate of claim 64, wherein said hard core material comprises one of
poly(methylmethacrylate), poly(styrene), poly(p-methylstyrene), poly(t-butylacrylamide), poly(styrene-co-methylmethacrylate), poly(styrene-co-t-butylacrylamide), poly(methylmethacrylate-co-t-butylacrylamide),

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or homopolymers derived from p-cyanophenyl methacrylate, pentachlorophenyl acrylate, methacrylonitrile, isobornyl methacrylate, phenyl methacrylate, acrylonitrile, isobornyl acrylate, p-cyanophenyl acrylate, 2-chloroethyl acrylate, 2-chloroethyl methacrylate, 2-naphthyl acrylate, n-isopropyl acrylamide, 1-fluoromethyl methacrylate, isopropyl methacrylate, or 2-hydroxypropyl methacrylate.

66. (original) The sealable ink receptive substrate of claim 64, wherein said soft shell material comprises one of a homo- or copolymer derived from n-butyl acrylate, n-ethylacrylate, 2-ethylhexylacrylate, methoxyethylacrylate, methoxyethoxy-ethylacrylate, ethoxyethylacrylate, ethoxyethoxyethylacrylate, 2-ethylhexyl-methacrylate, n-propylacrylate, hydroxyethylacrylate, tetrahydrofurfuryl acrylate, cyclohexylacrylate, iso-decylacrylate, n-decylmethacrylate, n-propylacrylate, vinylacetate, 2-(N,N-Dimethylamino)ethyl methacrylate, 2-N-Morpholinoethyl acrylate, or 3-Dimethylaminoneopentyl acrylate.

67. (original) The sealable ink receptive substrate of claim 64, wherein said soft shell material comprises a cationic monomer or a salt of a cationic monomer.

68. (original) The sealable ink receptive substrate of claim 67, wherein said soft shell material comprises one of poly(n-butyl acrylate co-trimethylammoniummethyl acrylate), poly(2-ethylhexyl acrylate co-trimethylammoniummethyl acrylate) poly(methoxyethylacrylate co-trimethylammoniummethyl acrylate), poly(ethoxy-ethylacrylate co-trimethylammoniummethyl acrylate), poly(n-butylacrylate-co-trimethylammoniummethyl acrylate), poly(n-butylacrylate-co-trimethylammoniummethyl methacrylate), poly(n-butylacrylate-co-vinylbenzyltrimethylammonium chloride), poly (n-ethylhexylacrylate-co-2-hydroxyethylacrylate co-trimethylammoniummethyl acrylate), poly (n-butylacrylate-co-2-hydroxyethylacrylate co-trimethylammoniummethyl

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acrylate), poly(n-ethylhexylacrylate -co- vinylbenzyltrimethylammonium chloride), poly(n-methoxyethylacrylate -co- vinylbenzyltrimethylammonium chloride), or poly(n-ethoxyethylacrylate -co-vinylbenzyltrimethylammonium chloride).

69. (original) The sealable ink receptive substrate of claim 64, wherein said fusible latex further comprises a coalescing agent.

70. (original) The sealable ink receptive substrate of claim 69, wherein said coalescing agent comprises one of ethylene glycol, propylene glycol, hexylene glycol, ester of ethylene glycol, propylene glycol, hexylene glycol, 2-butoxyethanol, 2,2,4-trimethylpentane diol monoisobutyrate, diisobutyl esters of a mixture of diacids, Rhodiasolve DIB(by Rhodia Chemical), butyl cellulose, 2-(2-butoxyethoxy)ethanol, 2-butoxyethanol, TEXANOL (Eastman Chemical), diisobutyl succinate, diisobutyl glutarate, diisobutyl adipate, SER-AD FX-510 (Sasol Chemical), or SER-AD FX-511 (Sasol Chemical).